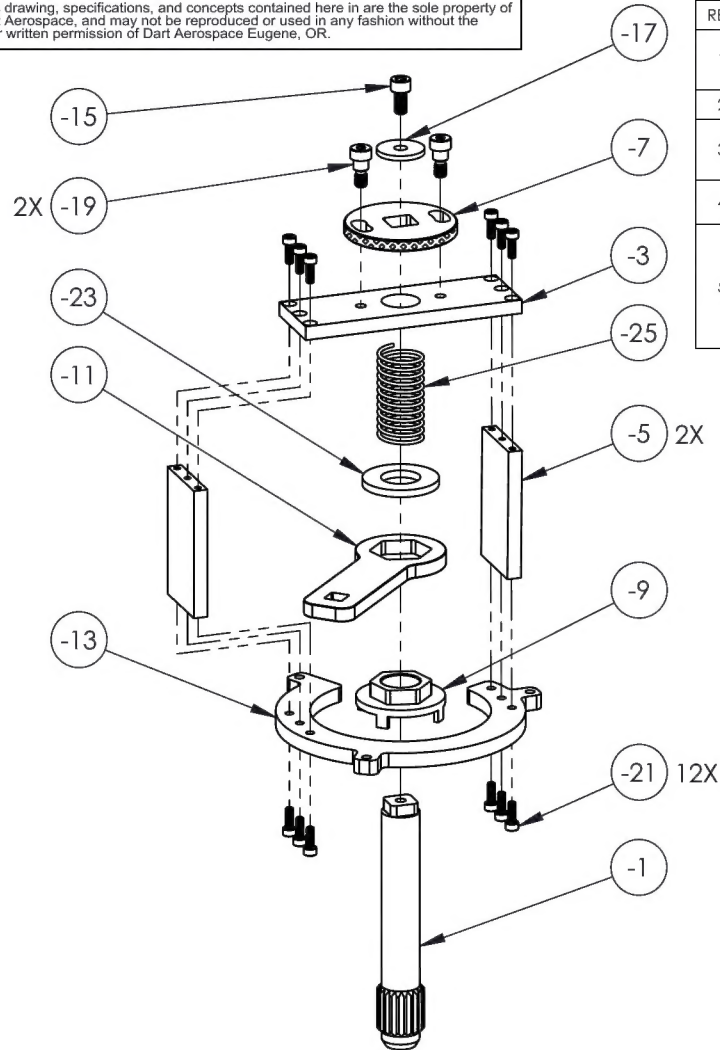
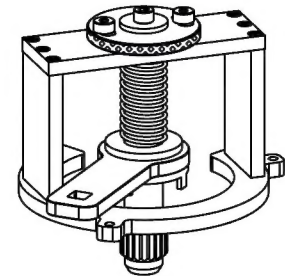


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.



REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-1 ADDED TOLERANCE TO R.125 AND LIMITS FOR .750 SQUARE DRIVE. -7 ADDED CHAMFER 2X .03 X 45°. -9 ADDED 2X R.03 TO I.D. -11 ADDED ENGRAVE NOTE, DELETED CHAMFER AROUND HEX. CH'D .03 X 45° TO HAND BUFF EDGES.	10/3/2012	RJC	SE
2	15-0159	-1 ADDED 4142 Q&T TO MATERIAL CALL OUT, CH'D RADII WAS R.125 +.005-.000 IS R.130 +.005-.000.	7/21/2015	RJC	JAG
3	16-0034	UPDATED TO NEW STANDARDS. ADDED OEM REF. -1 ADDED DIM 6.77. -9 CH'D DIM WAS 2X 1.4175-1.4205 IS 3X 1.4175-1.4205. CH'D DIM WAS 2X 1.4245-1.4260 IS 3X 1.4245-1.4260. -13 CH'D DIM WAS Ø7.319 B.C. IS (Ø7.319 B.C.).	2/15/2016	DPD	JAG
4	16-0123	-1 -3 -5 -7 -9 -11 -13 ADDED FINISH SPEC. -11 CH'D MAT'L WAS 1018/1020 CR IS 4140/4142. ADDED HEAT TREAT.	8/18/2016	DEW	JAG
5	16-0266	-1 CH'D DIM WAS Ø1.000/.999 S.F. -3 IS Ø1.000/.999 (S.F. -3). WAS 2X .752/.747 S.F. -7 IS 2X .752/.747 (S.F. -7). -1 -9 CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT RC 28-34. -3 CH'D DIM WAS Ø1.0038/1.0025 THRU S.F. -1 IS Ø1.0038/1.0025 THRU ALL (S.F. -1). -7 CH'D DIM WAS Ø3.00 MED. KNURL IS Ø2.95 MED. KNURL. WAS 2X .758/.753 S.F. -1 IS 2X .758/.753 (S.F. -1). -9 CH'D DIM WAS Ø1.0038/1.0025 S.F. -1 IS Ø1.0038/1.0025 (S.F. -1). WAS 3X 1.4205/1.4175 S.F. -11 IS 3X 1.4205/1.4175 (S.F. -11). -11 CH'D DIM WAS 3X 1.4260/1.4245 S.F. -9 IS 3X 1.4260/1.4245 (S.F. -9). -13 CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR.	12/6/2016	RJC	SM



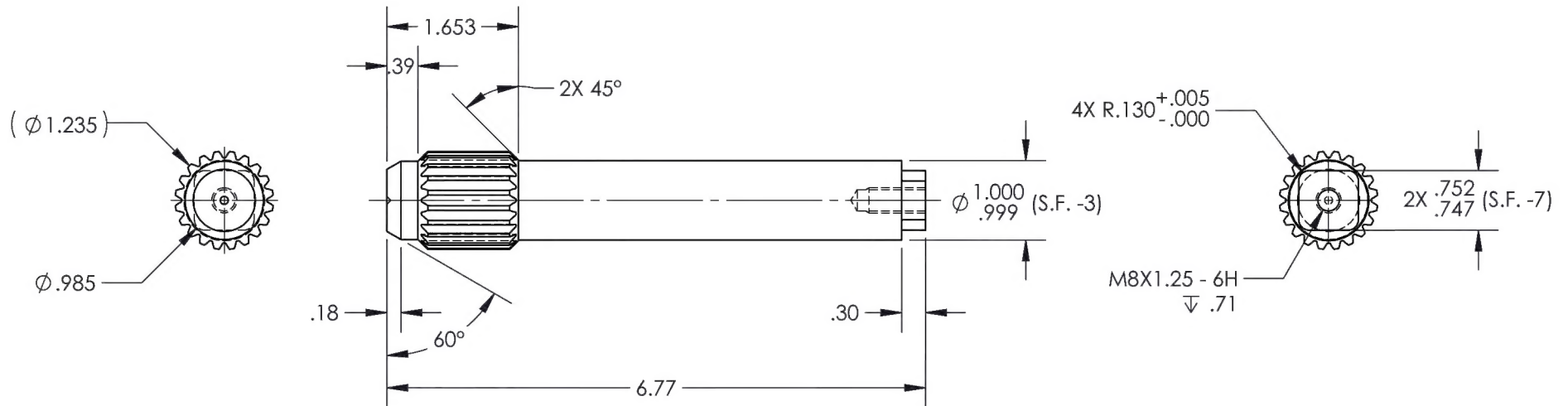
- NOTES:  
1. PART OF KIT RBW6505G00331-3T.  
2. REF. AGUSTA T/N: 3T6521A00138-W142AH.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	SPLINE	4140/4142		2
			-3	1	TOP BRACE	1018/1020 CR		3
			-5	2	SIDE BRACE	1018/1020 CR		4
			-7	1	ADJUSTER	1018/1020 CR		5
			-9	1	SPANNER SOCKET	4140/4142		6
			-11	1	WRENCH	4140/4142		7
			-13	1	BASE	A36/1018/1020 HR		8
		B/O	-15	1	SOCKET HEAD CAP SCREW	STEEL	M8X1.25 X 16mm (MCMASTER-CARR #91290A418)	1
		B/O	-17	1	FENDER WASHER	STEEL	Ø5/16 I.D. X Ø1-1/4 O.D. (MCMASTER-CARR #92140A116)	1
		B/O	-19	2	SOCKET HEAD SHOULDER BOLT	S.S.	M8X1.25 X 8mm (MCMASTER-CARR #90278A411)	1
		B/O	-21	12	SOCKET HEAD CAP SCREW	S.S.	M5X0.8 X 14mm (MCMASTER-CARR #92290A230)	1
		B/O	-23	1	FLAT WASHER	STEEL	Ø1 I.D. X Ø2 O.D. (MCMASTER-CARR #98029A038)	1
		B/O	-25	1	COMPRESSION SPRING	STEEL	Ø1-7/32 X Ø.091 WIRE X 2 (MCMASTER-CARR #9637K18)	1

DART AEROSPACE			
TITLE NUT TORQUE TOOL			
DWG NO. RBW6521A00138-W142AH-3T			REV 5
MAT'L		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ± 5°	
		.X ± .1 SURFACES = 125/	
DRAWN BY: PERRITT		1. BREAK ALL SHARP EDGES	
CHECKED: CLOUGH		.015 x 45° OR .015R	
OPPS APPR: ANDERSON		2. DIMENSIONAL LIMITS APPLY	
QA APPR: LINDSAY		AFTER PLATING	
APPROVED: GILBERT		3. INTERPRET DIM AND TOL PER	
		ASME Y14.5M-2009	
SCALE 1:5		USED ON MODEL	
DATE 12/31/2008		AW139	
		SHEET 1 OF 8	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-1 ADDED TOLERANCE TO R.125 AND LIMITS FOR .750 SQUARE DRIVE.	10/3/2012	RJC	SE
2	15-0159	-1 ADDED 4142 Q&T TO MATERIAL CALL OUT, CH'D RADII WAS R.125 +.005-.000 IS R.130 +.005-.000.	7/21/2015	RJC	JAG
3	16-0034	-1 ADDED DIM 6.77.	2/15/2016	DPD	JAG
4	16-0123	-1 ADDED FINISH SPEC.	8/18/2016	DEW	JAG
5	16-0266	-1 CH'D DIM WAS Ø1.000/.999 S.F. -3 IS Ø1.000/.999 (S.F. -3), WAS 2X .752/.747 S.F. -7 IS 2X .752/.747 (S.F. -7), CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT RC 28-34.	12/6/2016	RJC	SM



#### EXTERNAL SPINE DATA

NUMBER OF TEETH	20
MODULE	1.5
PRESSURE ANGLE	30°
STANDARD	1980
DEPTH	.0138
MAJOR DIAMETER	1.235
DIMENSION OVER Ø.125 PINS	1.386
TOLERANCE	-.004
DIMENSION OVER Ø.120 PINS	1.372

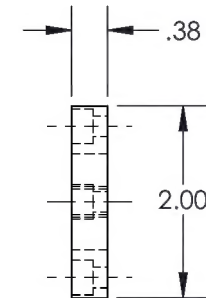
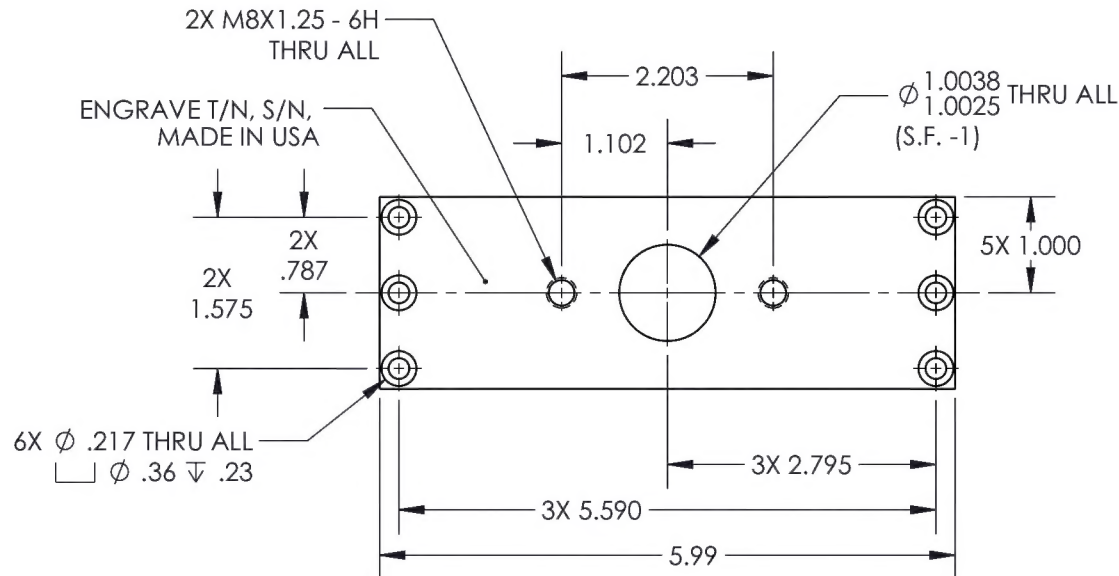
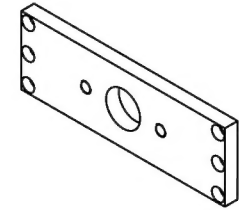
(-1)

SPLINE

<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-1</b>	REV <b>5</b>
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125°
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:2	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 12/31/2008	USED ON MODEL
	AW139
	SHEET 2 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	16-0123	-3 ADDED FINISH SPEC.	8/18/2016	DEW	JAG
5	16-0266	-3 CH'D DIM WAS Ø1.0038/1.0025 THRU S.F. -1 IS Ø1.0038/1.0025 THRU ALL (S.F. -1).	12/6/2016	RJC	SM

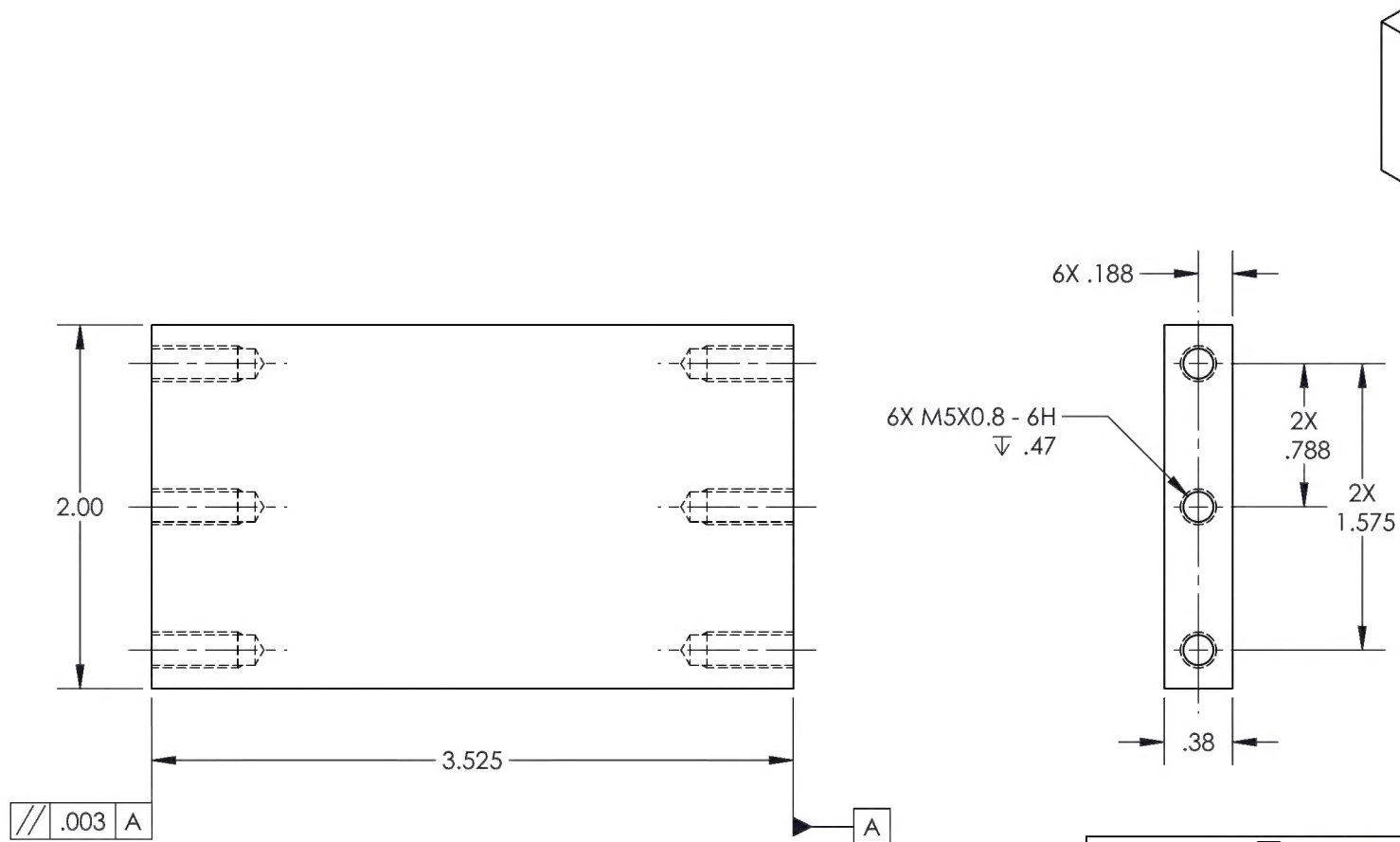


(-3)  
TOP BRACE

<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-3</b>	REV <b>5</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH BLACK OXIDE	.XX ± .01 ANGLES ± 5°
SPEC QMSI-6.2.2, B.O. REV D	.X ± .1 SURFACES = 125° ✓
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW139
SCALE 1:2	DATE 12/31/2008
SHEET 3 OF 8	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	16-0123	-5 ADDED FINISH SPEC.	8/18/2016	DEW	JAG

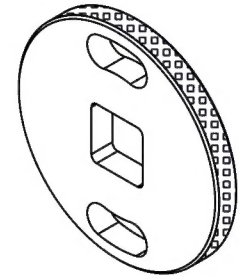
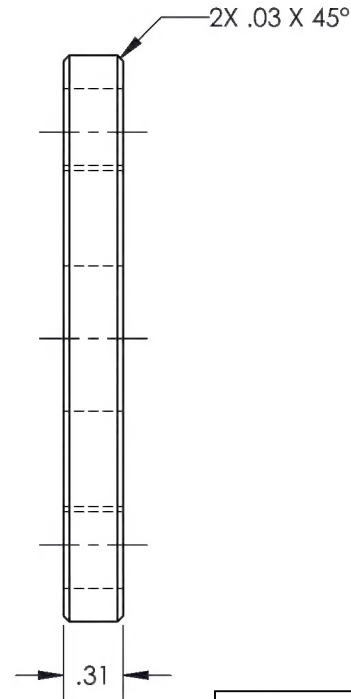
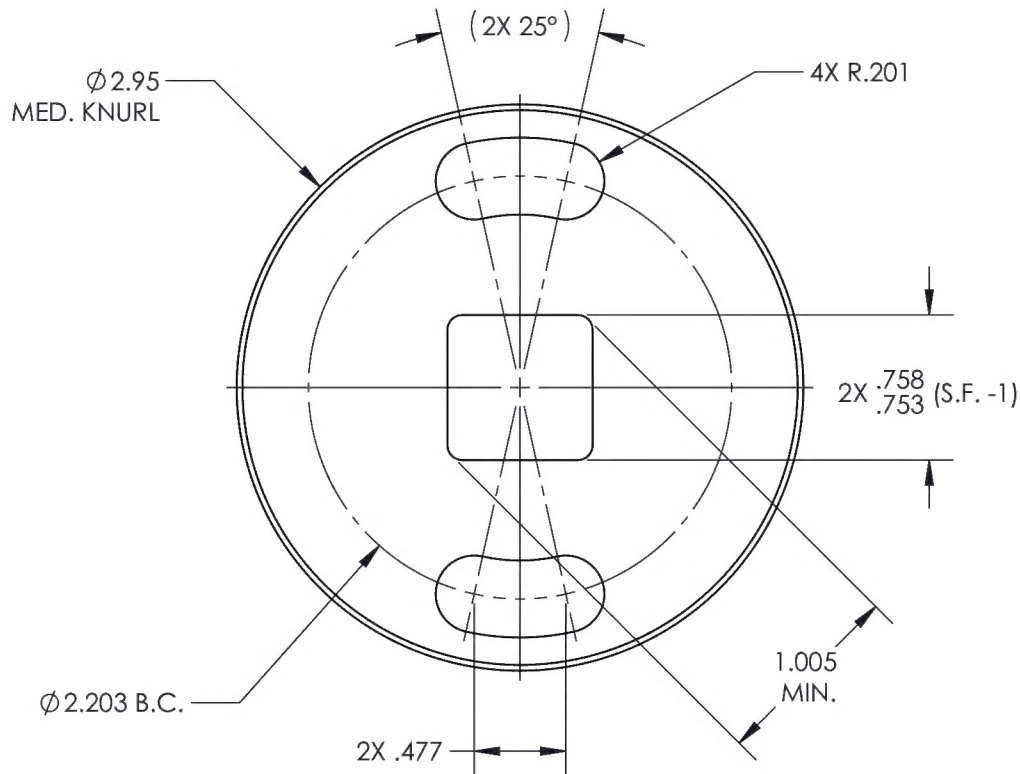


(-5)  
SIDE BRACE

<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-5</b>	REV <b>5</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125° ✓
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 12/31/2008	USED ON MODEL
	AW139
	SHEET 4 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-7 ADDED CHAMFER 2X .03 X 45°.	10/3/2012	RJC	SE
4	16-0123	-7 ADDED FINISH SPEC.	8/18/2016	DEW	JAG
5	16-0266	-7 CH'D DIM WAS Ø3.00 MED. KNURL IS Ø2.95 MED. KNURL, WAS 2X .758/.753 S.F. -1 IS 2X .758/.753 (S.F. -1).	12/6/2016	RJC	SM

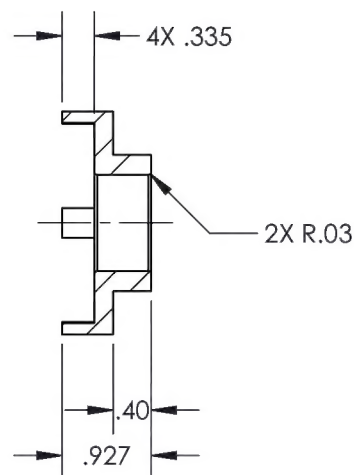
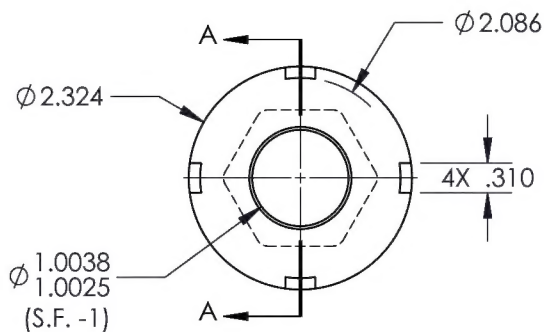


(-7)  
ADJUSTER

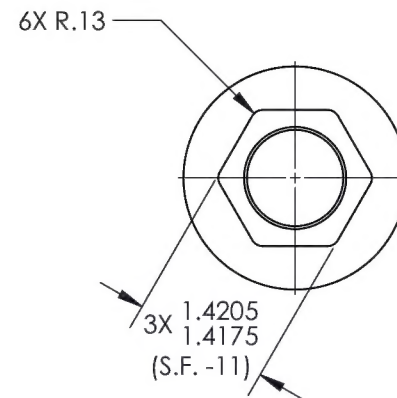
<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-7</b>	REV <b>5</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 12/31/2008	USED ON MODEL
	AW139
	SHEET 5 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-9 ADDED 2X R.03 TO I.D.	10/3/2012	RJC	SE
3	16-0034	-9 CH'D DIM WAS 2X 1.4175-1.4205 IS 3X 1.4175-1.4205.	2/15/2016	DPD	JAG
4	16-0123	-9 ADDED FINISH SPEC.	8/18/2016	DEW	JAG
5	16-0266	-9 CH'D DIM WAS Ø1.0038/1.0025 S.F. -1 IS Ø1.0038/1.0025 (S.F. -1), WAS 3X 1.4205/1.4175 S.F. -11 IS 3X 1.4205/1.4175 (S.F. -11), CH'D MATERIAL WAS 4140/4142 Q&T IS 4140/4142, ADDED HEAT TREAT R 28-34.	12/6/2016	RJC	SM



SECTION A-A

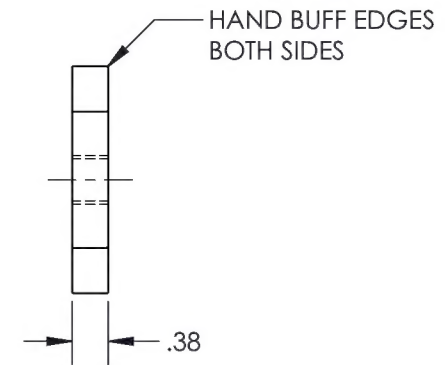
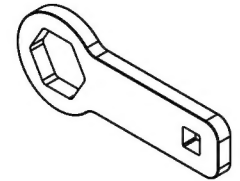
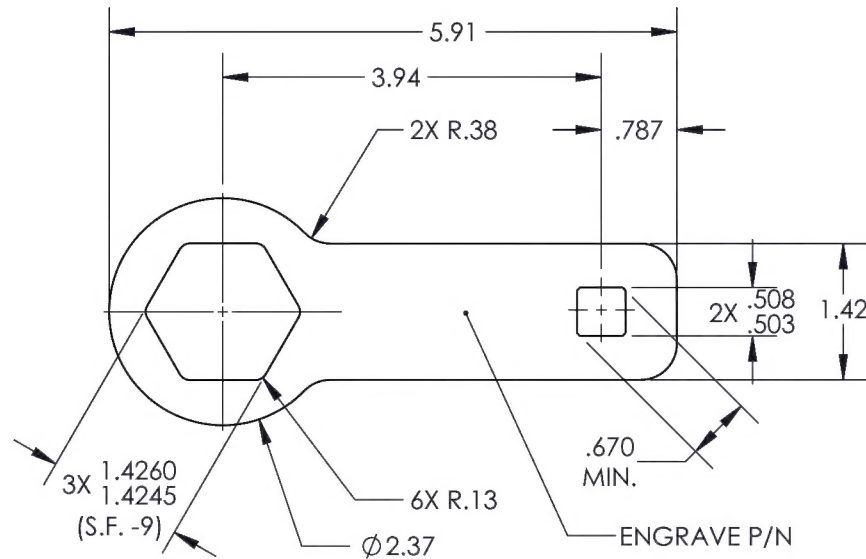


⑨  
SPANNER SOCKET

<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-9</b>	REV <b>5</b>
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± .5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125° ✓
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:2	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 12/31/2008	USED ON MODEL
	AW139
	SHEET 6 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-11 ADDED ENGRAVE NOTE, DELETED CHAMFER AROUND HEX, CH'D .03 X 45° TO HAND BUFF EDGES.	10/3/2012	RJC	SE
3	16-0034	-11 CH'D DIM WAS 2X 1.4245-1.4260 IS 3X 1.4245-1.4260.	2/15/2016	DPD	JAG
4	16-0123	-11 CH'D MAT'L WAS 1018/1020 CR IS 4140/4142. ADDED FINISH SPEC AND HEAT TREAT.	8/18/2016	DEW	JAG
5	16-0266	-11 CH'D DIM WAS 3X 1.4260/1.4245 S.F. -9 IS 3X 1.4260/1.4245 (S.F. -9).	12/6/2016	RJC	SM

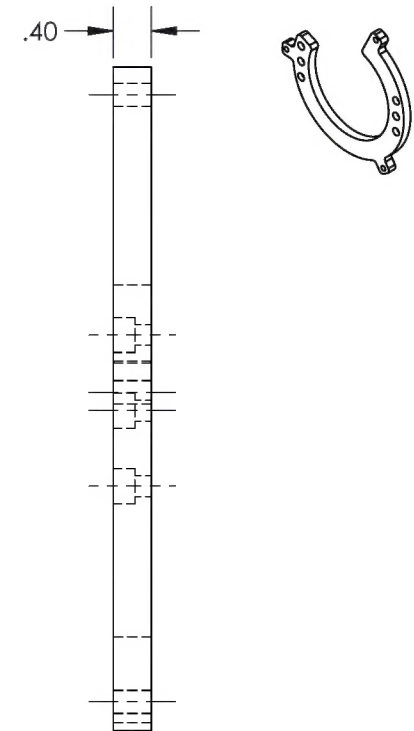
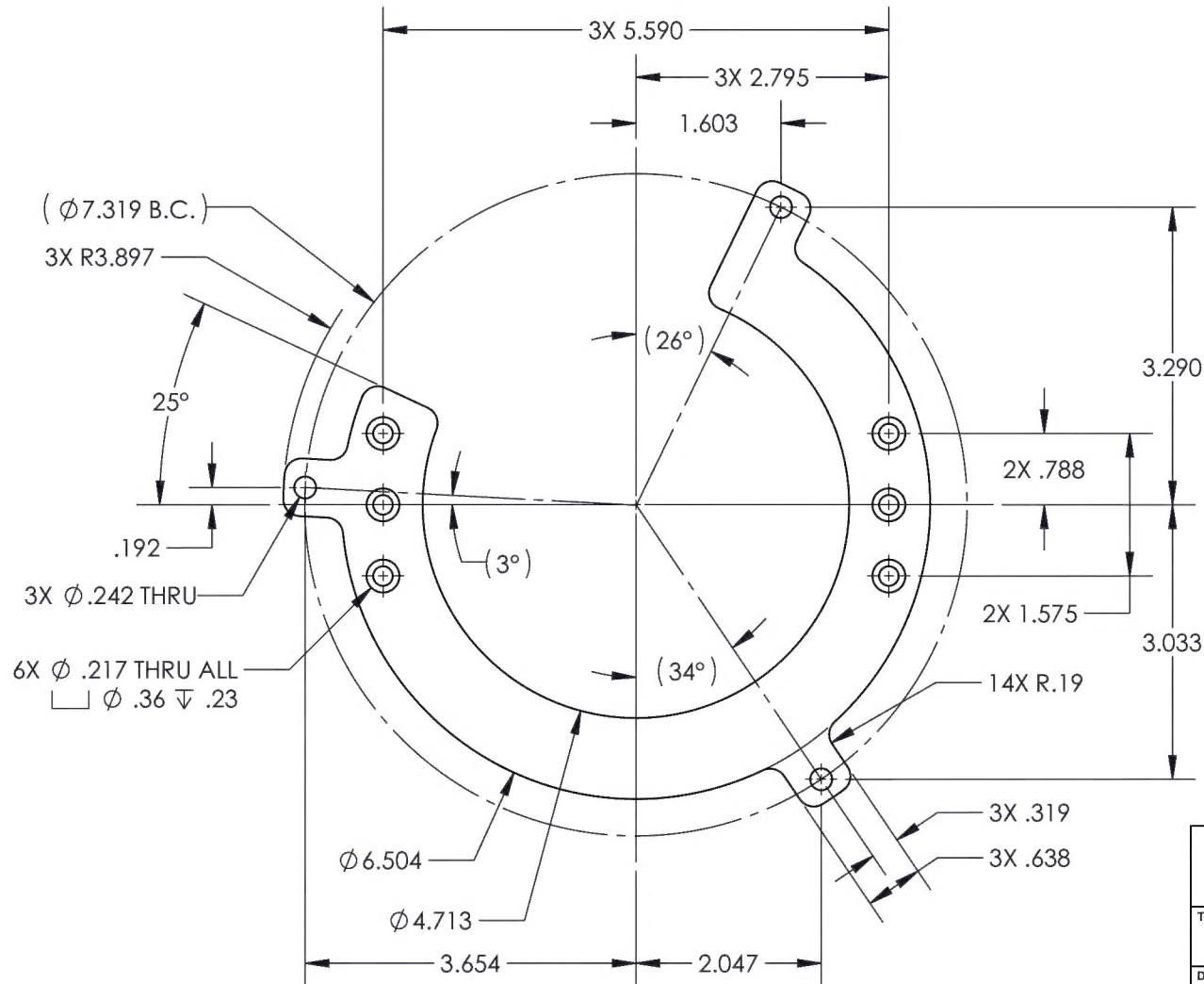


(-11)  
WRENCH

<b>DART AEROSPACE</b>	
TITLE <b>NUT TORQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-11</b>	REV <b>5</b>
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT 32-36	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125°
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
	USED ON MODEL
	AW139
SCALE 1:2	DATE 12/31/2008
	SHEET 7 OF 8

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	16-0034	-13 CH'D DIM WAS Ø7.319 B.C. IS (Ø7.319 B.C.).	2/15/2016	DPD	JAG
4	16-0123	-13 ADDED FINISH SPEC.	8/18/2016	DEW	JAG
5	16-0266	-13 CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR.	12/6/2016	RJC	SM



(-13)  
BASE

<b>DART AEROSPACE</b>	
TITLE <b>NUT TROQUE TOOL</b>	
DWG NO. <b>RBW6521A00138-W142AH-3T-13</b>	REV <b>5</b>
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: PERRITT	.X ± .1 SURFACES = 125
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: LINDSAY	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: GILBERT	USED ON MODEL AW139
SCALE 1:2	DATE 12/31/2008
SHEET 8 OF 8	